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10/587,505	07/27/2006	Gunther Oskar Eckert	W1.2279 PCT US	2484

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EXAMINER

CHEN, YUAN L

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2854

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/587,505	Applicant(s) ECKERT, GUNTHER OSKAR	
	Examiner Yuan L. Chen	Art Unit 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 43-62 is/are pending in the application.
- 4a) Of the above claim(s) 44-54, 58-62 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 43 and 55-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 November 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 43 is objected to because of the following informalities:

“first and printing groups” in line 10 of page 12 should be changed to --first and second printing groups— because of typographical error; and

“and transversely to said direction of production” in the last line 16 should be deleted, because not all the elongations are transversely to said direction of production.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kusunoki (Pub. No.: EP 1182035) in view of Rodi (Patent No.: US 5806230), and further in view of Langsch (Patent No.: US 6550384).

With respect to Claim 43, Kusunoki discloses in Figs. 1 - 2 as well as [0028] and [0050]: a method for compensating for misalignment of a web of material to be printed including:

providing at least first (P1 from the web direction as shown by the arrow in Fig. 1) and second (P2 from the web direction as shown by the arrow) printing groups arranged one behind the other in a printing press (MP) in a direction (arrow) of production of a material (W) to be printed;

positioning at least a first forme cylinder (first PC) and at least a first transfer cylinder (first BC) in said first printing group (P1);

positioning at least a second forme cylinder (second PC) and at least a second transfer cylinder (second BC) in said second printing group (P2);

positioning at least one printing forme (plate [0045] lines 1 - 3) on said first forme cylinder (first PC);

positioning at least one printing forme (plate [0045] lines 1 - 3) on said second forme cylinder (second PC);

providing at least one first print image location (image area of plates on the first PC) of a print image to be generated by said first forme cylinder (first PC) on said first printing forme (plate);

providing at least one second print image location (image area of plates on the second PC) of a print image to be generated by said second forme cylinder (second PC) on said second printing forme (plate); and

displacing (repositioning in lines 54 of [0050]) at least one of said at least first printing forme (plate) on said first forme cylinder (first PC) and said at least second

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printing forme (plate) on said second forme cylinder (second PC) of said second, subsequent printing group (P2) in response to a further one of said transverse and said longitudinal misalignment of the material to be printed.

Kusunoki does not teach the adjustment is carried out based on the elongation of the web prior to the printing of the web and an image regulator is used for compensation of the elongation.

However, Rodi teaches in Figs. 1 – 2 as well as column 2 lines 9 - 11 and column 7 lines 42 – 49, and 63 – 65 and column 8 lines 48 - 65:

determining an amount of at least one of an anticipated transverse elongation and an anticipated longitudinal elongation (Fig. 2) in the material (2) to be printed by said at least first and second printing groups (1s in Fig. 1) prior to (in advance in column 2 line 11 by using POSTSCRIPT stored in memory 11) printing of the material (2);

compensating (by digital image processor 6 in column 7 lines 56 – 65) for said anticipated elongation (POSTSCRIPT stored in memory 11) by the web of material (2) by locating said at least first print image location (coordinate) on said first printing forme on said first forme cylinder (first 1 on the left) and by locating said at least second print image location (coordinate) on said second printing forme on said second forme cylinder (second 1) both prior to (in advance in column 2 line 11 by using POSTSCRIPT stored in memory 11) printing of the web of material (2).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify Kusunoki's method for compensating for misalignment of the web by using Rodi's teaching to compensating the anticipated elongations prior to printing of said material to be printed for the purpose of easily and quickly reducing misalignment due to the elongation of the web to increase the quality of the printing.

This combination meets all the limitations of Claim 43 except another method of using image regulator for compensation of the elongation.

However, Langsch teaches in Figs. 1 – 3 as well as column 6 lines 20 - 34 and column 7 lines 58 – 64, and column 10 lines 33 - 38:

providing an image regulator (6) in said printing press;

locating said image regulator (6) between, in said direction (arrow) of production of the web of material (W), said first (1/2) and second (3/4) printing groups;

determining (line 33 - 38 in column 10) an amount of an actual (line 35) at least one of said transverse elongation (width) and longitudinal elongation in the web of material (W);

using said image regulator (6) for compensating (motor M control of waviness of the web in Figs. 2 – 3) for said determined actual amount of said at least one of said transverse elongation (width) and said longitudinal elongation in the web of material (W) between said first (1/2) and second (3/4) printing groups.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify the combination of Kusunoki and Rodi's method for compensating for misalignment of the web by using Langsch's teaching to compensating the elongations using the image regulator for the purpose of easily and quickly reducing misalignment due to the elongation of the web to increase the quality of the printing.

This modification/combination meets all the limitations of Claim 43.

4. Claims 55 - 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kusunoki in view of Rodi and Langsch, and further in view of Wang et al. (Patent No.: US 5816151).

With respect to Claim 55, the combination of Kusunoki, Rodi and Langsch applied above meets the limitations of Claim 55: the method of claim 43 further including providing a detection unit (8/9 in Fig. 1 column 6 lines 7 – 13 of Rodi) and using said detection unit (8/9) for detecting the print image (3s) being printed from said at least one first print location and said at least one second print location defined by said at least first and second printing formes (on 1s) on said first and second forme cylinders of said first and second groups (1s).

The combination does not teach how to detect the center point of the print image.

However, Wang et al. teach in Fig. 2 and column 8 lines 27 – 36 using the detecting device (34) for detecting at least one center point of a print image (16).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify the combination of Kusunoki, Rodi and Langsch's printing method of compensating for misalignment of the web by using Wang et al.'s method for detecting the center point of the image for the purpose of choosing an ideal point as an alignment point to increase the quality of the printing.

This modification/combination meets all the limitations of Claim 55.

With respect to Claim 56, the modification/combination meets the limitations of Claim 56: the method of claim 55 further including using said image regulator (6 in Figs. 1 – 3 as well as column 6 lines 20 - 34 and column 7 lines 58 – 64, and column 10 lines 33 – 38 of Langsch) for changing said center point (in Fig. 2 column 8 lines 27 – 36 of Wang et al., after actual coordinates of the center point is detected and sent to controller, the controller determines the difference between actual and wanted coordinates of the center points and using the drive M of the image regulator to change the center point).

With respect to Claim 57, the modification/combination meets the limitations of Claim 57: the method of claim 56 further including providing a controllable drive mechanism (1/2 in Figs. 1 - 2 and [0045] of Kusunoki), using said controllable drive mechanism (1/2 in [0045]) for driving at least one of said at least first forme cylinder (PC) and said at least first transfer cylinder (BC) of said at least first printing group (P1) and said at least second forme cylinder and said at least second transfer cylinder of said at least second printing group (P2), providing a control unit (control electronics in

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line 10 of [0046]) for said printing press and using said control unit for controlling said controllable drive mechanism (3/4 for longitudinal and axial adjustment in [0050]) for matching (repositioning in [0050]) said center point of each said print image location of said print image (desired coordinate data from the controller) with a center point of a said resultant print image (actually detected and sent to the controller in column 8 lines 27 – 36 of Wang et al.).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuan L. Chen whose telephone number is 571-270-

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3799. The examiner can normally be reached on Monday-Friday 7:30 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Judy Nguyen/
Supervisory Patent Examiner, Art Unit 2854

/yc/